

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/830,875	05/02/2001	Kunihiko Yano	Q64302	5307	
	7590 08/26/2002	(
Sughrue Mion Zinn Macpeak & Seas			EXAMINER		
2100 Pennsylvania Avenue N W Washington, DC 20037-3213			NORDMEYER	NORDMEYER, PATRICIA L	
		•	ART UNIT	PAPER NUMBER	
			1772	a	
		DATE MAILED: 08/26/2002			

Please find below and/or attached an Office communication concerning this application or proceeding.

Application/Control Number: 09/830,875 Page 2

Art Unit: 1772

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2, 5 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

The phrase "having an anti-reflection coating interposed between them" in claims 2 and 5

is unclear, which render the claims vague and indefinite. It is unclear from the claim language if

the anti-reflection coating is on the outside of the film which is attached to the substrate or if the

anti-reflection film coating is on the inside of the film, in between the cover glass and the film

layer.

2.

In claim 7, more than one period is present. Only one period is allowed in each claim.

Correction/clarification is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

Art Unit: 1772

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 – 3, 7, 8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Taniguchi (USPN 4,765,729).

Taniguchi discloses an optical article that uses a glass substrate (Column 2, lines 62 - 64) and Column 9, lines 42 - 45) as part of an optical article. An antireflection film (coating) is formed on the outside of the substrate (Column 18, lines 1 - 3). A film can be formed over the antireflection coating, placing it between the substrate and the film (Column 2, lines 24 - 29). Before placing the antireflection coating on the substrate, a hard coat film is placed on the substrate (Column 9, lines 53 - 57 and Column 18, lines 20 - 22). A film that is formed by coating and curing contains silica (silicon oxide) particles with diameters between 1 to 200 nm (Column 3, lines 22 - 23) and an organic silicon compound with hydrolysable groups (Column 3, line 52 to Column 5, line 15). The antireflection film can have a decorative part by dyeing the film (Column 9, lines 57 - 61). The surface of the antireflection is treated to give it water repellent characteristics (Column 2, lines 37 - 40).

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Denton (USPN 4,802,737).

Denton discloses a transparent overlay for instrument panels and works of art (Column

Application/Control Number: 09/830,875 Page 4

Art Unit: 1772

2, lines 10 - 12 and Column 5, lines 8 - 10) with a coating of antireflection material on both the inner and outer surfaces of the substrate (Column 3, lines 24 - 26, lines 51 - 55, and Figures 1B and 2B).

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Yokoo et al. (USPN 4,634,270).

Yokoo et al. discloses a cover plate made from a transparent glass substrate (Column 3, lines 32 - 33 and lines 44 - 45) with an antireflection coating formed on the inner and outer surfaces (Column 3, lines 36 - 38).

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taniguchi in view of Yokoo et al.

Taniguchi discloses an optical article that uses a glass substrate (Column 2, lines 62 – 64) and Column 9, lines 42 - 45) as part of an optical article with a hard coat film is placed on the substrate (Column 9, lines 53 – 57 and Column 18, lines 20 – 22). An antireflection film (coating) is formed on the outside of the substrate (Column 18, lines 1 – 3). However, Taniguchi

Application/Control Number: 09/830,875

Art Unit: 1772

fails to disclose the anti-reflection coating being formed on the inner surface of the cover glass substrate without the hard coating film interposed between them and the antireflection coating on the inner surface of the cover glass substrate is formed on the cover glass substrate with a film base of preformed film having an anti-reflection coating interposed between them.

Yokoo et al. teaches a transparent glass substrate (Column 3, lines 32 – 33 and lines 44 – 45) with an antireflection coating formed on the inner and outer surfaces without a hard coat film (Column 3, lines 36 – 38) in a cover plate for the purpose of forming a cover plate that has good mechanical strength with a smaller amount of absorption of the light.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the an optical article with a hard coat film and antireflection coating on the outer surface and an antireflection coating on the inside surface with a film base in Taniguchi in order to form a cover plate with a good mechanical strength between the antireflection coating and the substrate on the inner surface and good adhesion between the hard coat and anti-reflection coating as taught by Yokoo et al.

9. Claims 6, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taniguchi in view of Tsuchiya et al. (USPN 6,329,041).

Taniguchi discloses the claimed cover plate above except for the hard coating film being

Art Unit: 1772

transferred from a transfer foil, a primer layer being interposed between the cover glass substrate and the hard coating film and the cover glass being used to cover the view plane of a liquid crystal display placed in a housing of a portable apparatus and to make visible the view plane of the display unit.

Tsuchiya et al. teaches a primer layer in between the hard coat film and the substrate (Column 3, lines 35 – 37) and the protective film formed from an antireflection film, hard coat film and a plastic film (Column 9, line 31 to Column 10, line 9) used on the panel surface of liquid crystal displays (Column 1, lines 9 - 12) for the purpose of having a surface that is abrasion and crack resistance which protects the face of the liquid crystal display.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the primer layer in Taniguchi in order to improve the adhesion between the layers and to provide a surface that is resistant to abrasions and cracks for use in a liquid crystal display.

Regarding the hard coating film being transferred from a transfer foil in claim 6, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113. In this case, the limitation of transferring the coating from a foil is a method of

Application/Control Number: 09/830,875

Art Unit: 1772

production and therefore does not determine the patentability of the product itself. Process limitations are given little or no patentable weight. The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

Page 7

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,120,605 to Zuel et al., U.S. Patent No. 6,248,448 to Lippey et al., U.S. Patent No. 6,111,699 to Iwata et al., U.S. Patent No. 6,144,479 to Lugg et al., U.S. Patent No. 6,327,088 to Iwata et al., U.S. Patent No. 6,392,727 to Larson et al., U.S. Patent No. 6,379,788 to Choi et al., U.S. Patent No. 5,835,179 to Yamanaka and U.S. Patent No. 6,417,619 to Yasunori et al. are cited to show the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Nordmeyer whose telephone number is (703) 306-

Application/Control Number: 09/830,875

Art Unit: 1772

5480. The examiner can normally be reached on Mon.-Thurs. from 7:00 -4:30 p.m. & alternate Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on (703) 308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Patricia L. Nordmeyer

Examiner

Art Unit 1772

August 21, 2002

Acting SPE

Page 8